§ 73.24

inch composed of several pages or documents and thoroughly mixed are considered completely destroyed.

[73 FR 63577, Oct. 24, 2008]

§73.24 Prohibitions.

- (a) Except as specifically approved by the Nuclear Regulatory Commission, no shipment of special nuclear material shall be made in passenger aircraft in excess of (1) 20 grams or 20 curies, whichever is less, of plutonium or uranium-233, or (2) 350 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope).
- (b) Unless otherwise approved by the Nuclear Regulatory Commission, no licensee may make shipments of special nuclear material in which individual shipments are less than a formula quantity, but the total quantity in shipments in transit at the same time could equal or exceed a formula quantity, unless either of the following conditions are met:
- (1) The licensee shall confirm and log the arrival at the final destination of each individual shipment and retain the log for three years from the date of the last entry in the log. The licensee shall also schedule shipments to ensure that the total quantity for two or more shipments in transit at the same time does not equal or exceed the formula quantity, or
- (2) Physical protection in accordance with the requirements of §§ 73.20, 73.25, and 73.26 is provided by the licensee for such shipments as appropriate so that the total quantity of special nuclear material in the remaining shipments not so protected, and in transit at the same time, does not equal or exceed a formula quantity.

[44 FR 68188, Nov. 28, 1979, as amended at 53 FR 19257, May 27, 1988]

PHYSICAL PROTECTION OF SPECIAL NUCLEAR MATERIAL IN TRANSIT

§ 73.25 Performance capabilities for physical protection of strategic special nuclear material in transit.

(a) To meet the general performance objective and requirements of §73.20 an in-transit physical protection system shall include the performance capabilities described in paragraphs (b)

through (d) of this section unless otherwise authorized by the Commission.

- (b) Restrict access to and activity in the vicinity of transports and strategic special nuclear material. To achieve this capability the physical protection system shall:
- (1) Minimize the vulnerability of the strategic special nuclear material by using the following subfunctions and procedures:
- (i) Preplanning itineraries for the movement of strategic special nuclear material;
- (ii) Periodically updating knowledge of route conditions for the movement of strategic special nuclear material:
- (iii) Maintaining knowledge of the status and position of the strategic special nuclear material en route; and
- (iv) Determining and communicating alternative itineraries en route as conditions warrant.
- (2) Detect and delay any unauthorized attempt to gain access or introduce unauthorized materials by stealth or force into the vicinity of transports and strategic special nuclear material using the following subsystems and subfunctions:
- (i) Controlled access areas to isolate strategic special nuclear material and transports to assure that unauthorized persons shall not have direct access to, and unauthorized materials shall not be introduced into the vicinity of, the transports and strategic special nuclear material, and
- (ii) Access detection subsystems and procedures to detect, assess and communicate any unauthorized penetration (or such attempts) of a controlled access area by persons, vehicles or materials so that the response will satisfy the general performance objective and requirements of §73.20(a).
- (3) Detect attempts to gain unauthorized access or introduce unauthorized materials into the vicinity of transports by deceit using the following subsystems and subfunctions:
- (i) Access authorization controls and procedures to provide current authorization schedules and access criteria for persons, materials and vehicles; and
- (ii) Access controls and procedures to verify the identity of persons, materials and vehicles, to assess such identity against current authorization

schedules and access criteria before permitting access, and to initiate response measures to deny unauthorized entries.

- (c) Prevent or delay unauthorized entry or introduction of unauthorized materials into, and unauthorized removal of, strategic special nuclear material from transports. To achieve this capability the physical protection system shall:
- (1) Detect attempts to gain unauthorized entry or introduce unauthorized materials into transports by deceit using the following subsystems and subfunctions:
- (i) Access authorization controls and procedures to provide current authorization schedules and entry criteria for access into transports for both persons and materials; and
- (ii) Entry controls and procedures to verify the identity of persons and materials and to permit transport entry only to those persons and materials specified by the current authorization schedules and entry criteria.
- (2) Detect attempts to gain unauthorized entry or introduce unauthorized material into transports by stealth or force using the following subsystems and subfunctions:
- (i) Transport features to delay access to strategic special nuclear material sufficient to permit the detection and response systems to function so as to satisfy the general performance objective and requirements of §73.20(a);
- (ii) Inspection and detection subsystems and procedures to detect unauthorized tampering with transports and cargo containers; and
- (iii) Surveillance subsystems and procedures to detect, assess and communicate any unauthorized presence of persons or materials and any unauthorized attempt to penetrate the transport so that the response will satisfy the general performance objective and requirements of §73.20(a).
- (3) Prevent unauthorized removal of strategic special nuclear material from transports by deceit using the following subsystems and subfunctions:
- (i) Authorization controls and procedures to provide current schedules for authorized removal of strategic special nuclear material which specify the persons authorized to remove and receive

- the material, the authorized times for such removal and receipt and authorized places for such removal and receipt.
- (ii) Removal controls and procedures to establish activities for transferring cargo in emergency situations; and
- (iii) Removal controls and procedures to permit removal of strategic special nuclear material only after verification of the identity of persons removing or receiving the strategic special nuclear material, and after verification of the identity and integrity of the strategic special nuclear material being removed from transports.
- (4) Detect attempts to remove strategic special nuclear material from transports by stealth or force using the following subsystems and subfunctions:
- (i) Transport features to delay unauthorized strategic special nuclear material removal attempts sufficient to assist detection and permit a response to satisfy the general performance objective and requirements of §73.20(a);
- (ii) Detection subsystems and procedures to detect, assess and communicate any attempts at unauthorized removal of strategic special nuclear material so that response to the attempt can be such as to satisfy the general performance objective and requirements of §73.20(a).
- (d) Respond to safeguards contingencies and emergencies to assure that the two capabilities in paragraphs (b) and (c) of this section are achieved, and to engage and impede adversary forces until local law enforcement forces arrive. To achieve this capability, the physical protection system shall:
- (1) Respond rapidly and effectively to safeguards contingencies and emergencies using the following subsystems and subfunctions:
- (i) A security organization composed of trained and qualifed personnel, including armed escorts, one of whom is designated as escort commander, with procedures for command and control, to execute response functions.
- (ii) Assessment procedures to assess the nature and extent of security related incidents.
- (iii) A predetermined plan to respond to safeguards contingency events.

§ 73.26

- (iv) Equipment and procedures to enable responses to security related incidents sufficiently rapid and effective to achieve the predetermined objective of each action.
- (v) Equipment, vehicle design features, and procedures to protect security organization personnel, including those at the movement control center, in their performance of assessment and response related functions.
- (2) Transmit detection, assessment and other response related information using the following subsystems and subfunctions:
- (i) Communications equipment and procedures to rapidly and accurately transmit security information among armed escorts.
- (ii) Equipment and procedures for two-way communications between the escort commander and the movement control center to rapidly and accurately transmit assessment information and requests for assistance by local law enforcement forces, and to coordinate such assistance.
- (iii) Communications equipment and procedures for the armed escorts and the movement control center personnel to notify local law enforcement forces of the need for assistance.
- (3) Establish liaisons with local law enforcement authorities to arrange for assistance en route.
- (4) Assure that a single adversary action cannot destroy the capability of armed escorts to notify the local law enforcement forces of the need for assistance.

[44 FR 68188, Nov. 28, 1979]

§ 73.26 Transportation physical protection systems, subsystems, components, and procedures.

(a) A transportation physical protection system established pursuant to the general performance objectives and requirements of §73.20 and performance capability requirements of §73.25 shall include, but are not necessarily limited to, the measures specified in paragraphs (b) through (l) of this section. The Commission may require, depending on the individual transportation conditions or circumstances, alternate or additional measures deemed necessary to meet the general performance objectives and requirements of §73.20.

The Commission also may authorize protection measures other than those required by this section if, in its opinion, the overall level of performance meets the general performance objectives and requirements of §73.20 and the performance capability requirements of §73.25.

- (b) Planning and scheduling. (1) Shipments shall be scheduled to avoid regular patterns and preplanned to avoid areas of natural disaster or civil disorders, such as strikes or riots. Such shipments shall be planned in order to avoid storage times in excess of 24 hours and to assure that deliveries occur at a time when the receiver at the final delivery point is present to accept the shipment.
- (2) Arrangements shall be made with law enforcement authorities along the route of shipments for their response to an emergency or a call for assistance.
- (3) Security arrangements for each shipment shall be approved by the Nuclear Regulatory Commission prior to the time for the seven-day notice required by §73.72. Information to be supplied to the Commission in addition to the general security plan information is as follows:
- (i) Shipper, consignee, carriers, transfer points, modes of shipment,
- (ii) Point where escorts will relinquish responsibility or will accept responsibility for the shipment,
- (iii) Arrangements made for transfer of shipment security, and
- (iv) Security arrangements at point where escorts accept responsibility for an import shipment.
- (4) Hand-to-hand receipts shall be completed at origin and destination and at all points enroute where there is a transfer of custody.
- (c) Export/import shipments. (1) A licensee who imports a formula quantity of strategic special nuclear material shall make arrangements to assure that the material will be protected in transit as follows:
- (i) An individual designated by the licensee or his agent, or as specified by a contract of carriage, shall confirm the container count and examine locks and/or seals for evidence of tampering, at the first place in the United States